SCIENCE ADVISORY COMMITTEE
MINUTES

Meeting Location: Imperial Irrigation District, La Quinta, CA

Meeting Date: June 6, 2001
Draft: June 6, 2001 Approved: October 22, 2001

Science Advisory Committee Members: (Presence indicated by "X")

- Al Johnson, Chair, Professor Emeritus, Biology
- X Rey Stendell, Senior Scientist USGS – Acting Chair
- X Phil Roberts, UC Riverside, Associate Dean AES/CE
- X Glenn Black, CAL F&G
- X Tim Krantz, University of Redlands, Director, Salton Sea Database Program
- X Bart Christensen, CAL EPA

Science Advisory Committee Ex-Officio Members: (Presence indicated by "X")

- X Milt Friend, Chief Scientist, Salton Sea Science Office
- X Douglas Barnum, Science Coordinator, Salton Sea Science Office

Topic: Welcome and Introduction. (R.Stendell). The meeting began at 8:30 a.m. with introductions of the Science Advisory Committee (SAC) and the small number of public present. A sign-up sheet was circulated to record attendees and help develop a mailing list for meeting announcements (Attachment 1). Rey Stendell served as the acting Chair for the meeting as Al Johnson was unable to attend.

Topic: Science Advisory Committee Meetings (R. Stendell)
The Chair reminded attendees that SAC meetings deal with science issues, not policy issues since the Science Office is not charged with how to restore the Sea. Those judgments are management decisions. The role of the Science Office is to look at environmental impacts and at the scientific questions associated with management actions being considered. The SAC provides recommendations, comments, and guidance, which the Science Office uses in its interactions with management. The SAC has the authority to put together work groups to gather information on specific topics, to network and use other means within the scope of Science Office operations to provide scientific input.

Topic: Approval of minutes (R. Stendell)
The minutes from the previous meeting were approved. It was agreed that the minutes be posted on the BOR website following their approval - located at (www.lc.usbr.gov) or (www.lc.usbr.gov/~saltnsea/ssrest.html).

Topic: Finalization of agenda (R. Stendell)
The agenda was approved. During the period of public comment Bart Christensen requested an addition to discuss a concept paper he is writing on possible CAL EPA

funding for science issues/needs of the restoration project. It was also noted that status and trends of tilapia would be discussed as an addition to the agenda.

Topic: Status of current science activities (M. Friend)
A draft Long Term Disease Prevention and Control Strategy document was provided to the SAC and processes for finalization noted. The Plan will comprise a section within the Restoration Project Alternatives Document.

Monitoring programs – there are 2 primary monitoring programs, one associated with the Enhanced Evaporation System (EES) test site and the other with the Solar pond test site. Investigations by the Western Ecological Research Center are being conducted to evaluate environmental impacts associated with EES salt drift at the Navy Test Base site. One of the difficulties in trying to make a judgment is to separate the impacts from salt drift from the Sea, and what is due to the technologies being evaluated. An RFP is being developed for chemical evaluation of water, sediments and aquatic invertebrates in the impoundments associated with the EES units and the solar ponds. The Science Office has also agreed to develop an RFP for a monitoring plan to evaluate the impacts on the ecosystem (downstream effects) of bioremediation technology on the Salton Sea. That technology is being pursued by the private sector as an independent action. Copies of the Contaminants Assessment RFP were provided to the SAC. That RFP was being released and input was requested for posting to maximize scientific community awareness of the RFP. The SAC will be asked to evaluate the responses to the RFP.

Topic: Proposal Review Process (M. Friend)
An outline of the RFP review process used by the Science Subcommittee was provided to the SAC. They were asked to edit/rework the process to establish a current system for review of proposals.

Topic: Status and trends of tilapia (R. Reidel)
Dr. Riedel discussed the status and trends of tilapia in response to: "What is the status of the Tilapia population?" In general, the response indicated that the major fish species of the Sea, including tilapia, are self-sustaining populations. Tilapia populations may be on a 5-year cycle with a single dominant age-class carrying through that cycle. Therefore, the current decline over previous years is part of the normal cycle. Recruitment is being seen into the population.

Break for lunch 12:00 p.m. reconvene at 1:00 p.m.

Topic: Develop Requests for Proposal (RFP) for Fishery baselines. (M. Friend)
The need for a fishery baseline against which change can be evaluated was discussed. The two basic needs were monitoring fishery parameters to assess the impacts (positive or negative) of changing environmental conditions resulting from restoration activities. The other was to evaluate fish harvest considerations. The discussion revealed major differences in data needs for those different purposes. It was also noted that coordination of effort was needed to avoid duplication of efforts being undertaken by California Department of Fish and Game. Glenn Black indicated those efforts would include monitoring sport fishing by conducting creel census work over the next 5-10 years. In

addition to catch per unit effort information, data will be gathered on weight and length of fish caught, age of the fish and location. Some sampling will also be done by netting to evaluate the status of young of the year. Coordination needs to include sampling and data collection.

Action Item: The Science office will write an RFP to be sent to the SAC by June 15th.

Topic: Concept Paper (B. Christensen)
Salton Sea Budget for CAL EPA. Seeking state funding that can pass to the Salton Sea Authority/Science Office for scientific research that is related to CAL EPA's mission and for staff for CAL EPA to be devoted to Salton Sea issues. Acquisition of instrumentation for a network of automated water quality profilers for the Sea was suggested as a good investment that CAL EPA should consider.

Topic: Requests for Proposal for salt tolerances of Salton Sea biota (M. Friend).
The critical question is: What should the salinity level of the Sea be? The discussion indicated that the answer is the lowest level of salinity that causes unacceptable impacts on the most sensitive life forms of concern is the level salinity needs to be kept below. It is also necessary to consider how low salinity can be dropped to without having negative impacts on the current biota. Avian botulism was identified as a disease problem that could be enhanced by lower levels of salinity if they are reduced to low. Another important question involves what parameters should be evaluated to determine salt impacts. Consensus judgments were pileworms and barnacles at the invertebrate level and fish at the vertebrate level. Fish evaluations need to include the entire life cycle from eggs to adults. In addition to death of the organism, growth rates and reproduction impacts were other parameters to be evaluated.

Topic: Requests for Proposal for evaluation of the source of odors at the Salton Sea (M. Friend).
A draft RFP was presented with an approach of addressing a specific list of questions. The resulting discussion suggested that it would be better to define the scope of the problem first by conducting a survey of human perspectives and records of complaints. Input was sought from the SAC relative to questions the survey should address.

Topic: Workshops to resolve scientific issues.

- Wetland development at the Salton Sea - SAC asked to consider whether a workshop would be of value and if so what questions should be addressed re: wetland development. BOR is working with the Torres-Martinez Tribe to develop a pilot project. Use of wetlands to treat water (i.e., eutrophication) is underway at the New River. Carol Roberts was asked to present a discussion of that project in the near future.

- Solar ponds
  The purpose of the RFP the Science Office is developing is to determine if there are potential contaminant effects on biota. Questions focused around how much can be gleaned from the small-scale pilot effort? What information can be obtained to give

management the best input for the next phase. Not resolved was the issues of whether or not there was merit in organizing a workshop to discuss the use of solar ponds as bird habitat.

- The role of the Salton Sea as Pacific Flyway bird habitat.
  It was determined that the data presented in the maps printed by the University of Redlands should be evaluated before the mapping information is put out. Evaluations should include a timeline comparison relative to the changing habitat base. A major question was how to define the importance of the Salton Sea as a bird habitat. Keeping in mind, that numbers do not equate to value, what are the criteria for value? No resolution was reached relative to criteria that should be used.

Topic: Next Meeting: The next meeting to be determined.